

### **Amendment to the Claims:**

Applicants respectfully request that the claims in the subject patent application be amended as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

- Claim 1      (Original)      A catalyst having a macropore structure comprising mordenite zeolite having a silica to alumina molar ratio in the range of about 50:1 to about 105:1 and wherein the peak macropore diameter of the catalyst, measured by ASTM Test No. D 4284-03, is less than about 900 angstroms and the cumulative pore volume of the catalyst at pore diameters less than or equal to about 500 angstroms, measured by ASTM Test No. D 4284-03, is less than or equal to about 0.30 milliliters per gram.
- Claim 2      (Original)      The catalyst of claim 1 wherein the cumulative pore volume at pore diameters less than or equal to about 400 angstroms is less than or equal to about 0.30 milliliters per gram.
- Claim 3      (Original)      The catalyst of claim 2 wherein the cumulative pore volume at pore diameters less than or equal to about 300 angstroms is less than or equal to about 0.25 milliliters per gram.
- Claim 4      (Currently amended)      The catalyst of claim 3 wherein the cumulative pore volume at pore diameters less than or equal to about 300 angstroms is less than ~~to~~ or equal to about 0.20 milliliters per gram.

- Claim 5 (Original) The catalyst of claim 4 wherein the cumulative pore volume of the catalyst at pore diameters less than or equal to about 400 angstroms is in the range of about 0.05 milliliters per gram to about 0.18 milliliters per gram.
- Claim 6 (Original) The catalyst of claim 5 wherein the cumulative pore volume of the catalyst at pore diameters less than or equal to about 300 angstroms is in the range of about 0.08 milliliters per gram to about 0.16 milliliters per gram.
- Claim 7 (Original) The catalyst of claim 1 wherein the peak macropore diameter is in the range of about 400 angstroms to about 800 angstroms.
- Claim 8 (Original) The catalyst of claim 7 wherein the peak macropore diameter is in the range of about 400 angstroms to about 700 angstroms.
- Claim 9 (Original) The catalyst of claim 8 wherein the peak macropore diameter of the catalyst is in the range of about 450 angstroms to about 600 angstroms.
- Claim 10 (Original) The catalyst of claim 1 wherein the mordenite zeolite has a silica to alumina molar ratio of about 65:1 to about 95:1.
- Claim 11 (Original) The catalyst of claim 10 wherein the mordenite zeolite has a silica to alumina molar ratio of about 75:1 to about 90:1.
- Claim 12 (Original) The catalyst of claim 1 wherein the catalyst is in the form of a tablet.

- Claim 13 (Original) A catalyst composite comprising:
- (a) the catalyst of claim 1; and
  - (b) a binder.
- Claim 14 (Cancelled)
- Claim ~~45~~14 (Currently amended) The catalyst composite of claim ~~44~~13 wherein the binder is alumina.
- Claim ~~46~~15 (Original) The catalyst composite of claim 13 wherein the mordenite zeolite is present in the range of about 50 weight percent to about 99 weight percent based on the total dry weight of the catalyst composite.
- Claim ~~47~~16 (Currently amended) The catalyst composite of claim ~~46~~15 wherein the mordenite zeolite is present in the range of about 60 weight percent to about 90 weight percent based on the total dry weight of the catalyst composite.
- Claim ~~48~~17 (Currently amended) A catalyst composite prepared ~~by the process~~ using the catalyst composite of claim 13.
- Claim ~~49~~18 (Previously amended) A process for preparing a catalyst composite wherein the peak macropore diameter of the catalyst, measured by ASTM Test No. D 4284-03, is less than about 900 angstroms and the cumulative pore volume of the catalyst at pore diameters less than or equal to about 500 angstroms, measured by ASTM Test No. D 4284-03, is less than or equal to about 0.30 milliliters per gram, comprising:

- (a) contacting a mordenite zeolite having a silica to alumina molar ratio in the range of about 50:1 to about 105:1 with a binder in the presence of volatiles to form a mixture wherein the weight percent of mordenite zeolite is in the range of about 50 to about 99 based on the total dry weight of the resulting catalyst composite, and wherein the volatiles in the mixture are in the range of about 30 weight percent to about 70 weight percent of the mixture;
- (b) shaping the mixture to form a composite;
- (c) drying the composite; and
- (d) calcining the composite in a substantially dry environment.

Claim ~~20~~19 (Currently amended) The process of claim ~~49~~18 wherein in step (b) shaping comprises extruding.

Claim ~~24~~20 (Currently amended) The process of claim ~~49~~18 wherein in step (a) the weight percent of mordenite zeolite is in the range of about 60 to about 90 based on the total weight of the mixture.

Claim 22 (Cancelled)

Claim ~~23~~21 (Currently amended) The process of claim ~~22~~20 wherein the binder is alumina.

Claim ~~24~~22 (Currently amended) The process of claim ~~49~~18 wherein in step (a) the volatiles in the mixture are present in the range of about 35 weight percent to about 50 weight percent of the mixture.

Claim ~~25~~23 (Currently amended)      The process of claim ~~24~~22 wherein the volatiles comprise water and an acid.

Claim ~~26~~24 (Currently amended)      A catalyst composite prepared by the process of claim ~~19~~18.

Claim 27-48 (cancelled)